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WATER SUPPLY OUTLOOK FOR MONTANA

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MAR 3 - 1967

CURRENT SERIAL RECORDS

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE,
and
MONTANA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with Federal, State, and private organizations listed on the inside back cover of this report.

AS OF
FEB. 1, 1967

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be on effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	P. O. Box 38, Boise, Idaho 83701
Montana	P. O. Box 855, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4001 Federal Building, Salt Lake City, Utah 84111
Washington	840 Bon Marche Bldg., Spokane, Washington 99206
Wyoming	P. O. Box 340, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK
FEDERAL-STATE-PRIVATE COOPERATIVE SNOW SURVEYS
for
MONTANA

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MONTANA WATER SUPPLY OUTLOOK
February 1, 1967

* * * * *

*
* Much above average snow accumulation during the *
* past month greatly improved the water supply *
* outlook. Spring and summer runoff is expected *
* to be near to above average. The snow pack is *
* denser than normal with prospects for good late *
* season irrigation water supplies. *
*
* * * * *

All snow courses show large increases in water content during the month with February 1 readings two to three times that measured on January 1. The snow pack is quite dense for this time of year as a result of mild mountain temperatures.

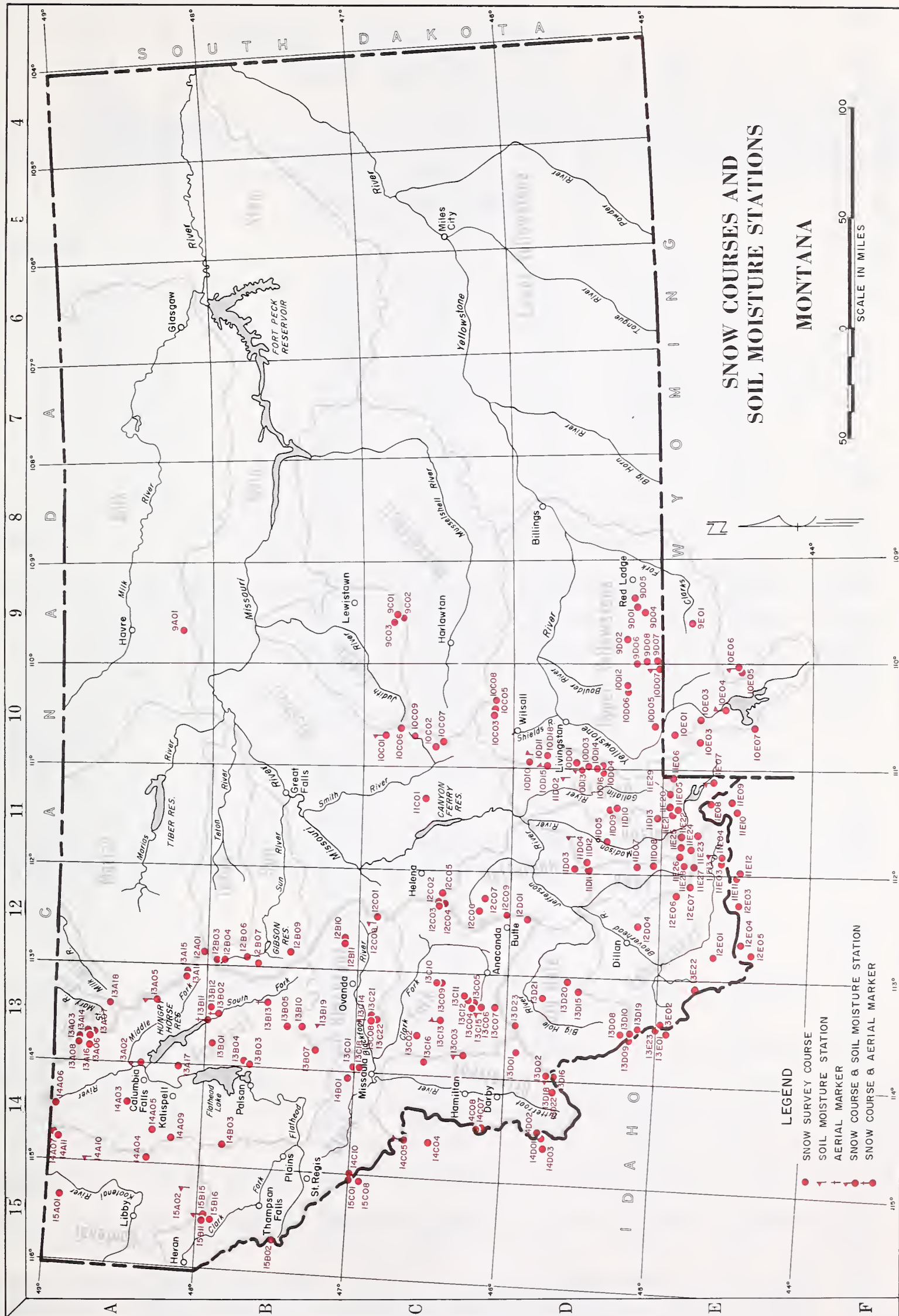
The Bitterroot and upper Clark Fork areas that had deficient runoff last season presently have a snow pack a little above average. The Kootenai and Flathead drainages have a snow pack 120 to 135 percent average. East of the divide, mountain snow cover is 130 to 150 percent average in the Missouri and Yellowstone headwaters and about 110 percent average on tributaries to the Missouri between Toston and Ft. Benton.

Volume forecasts of spring and summer streamflow are not issued this month but runoff is expected to be about 110 to 120 percent average in the Kootenai drainage, and 110 to 115 percent average in the Flathead drainage. Runoff in the upper Clark Fork, Bitterroot and Blackfoot drainages should be 105 to 110 percent average.

East of the divide, major headwater streams to the Missouri River are expected to flow from near average to 130 percent average, combining for about 10 percent above average flow at Toston. Streams flowing into the Missouri Main Stem from the east should produce 120 to 140 percent average flow, while those originating along the divide are expected to flow 105 to 110 percent average. Flow in the lower reaches of the Missouri should be around 110 percent average.

Streamflow in the Yellowstone is expected at 105 to 110 percent average. The Shields River should flow about 120 percent average, while other tributaries such as Boulder, Stillwater, Clarks Fork and Rock Creek are in the 105 to 110 percent range. The Big Horn will contribute a little above average runoff with resultant streamflow downstream at Miles City and Sidney of 105 to 110 percent average.

Irrigation reservoirs should have no problem filling, providing mountain snowfall remains near average for the next few months.



INDEX to MONTANA SNOW COURSES and SOIL MOISTURE STATIONS

SNOW COURSES

COLUMBIA RIVER BASIN										COLUMBIA RIVER BASIN									
Number	Elev.	Sec.	Typ.	Range	Record Begin	Measuring Dates $\frac{1}{2}$	Meas. By $\frac{1}{2}$	Drainage Basin & Course Name		Number	Elev.	Sec.	Typ.	Range	Record Begin	Measuring Dates $\frac{1}{2}$	Meas. By $\frac{1}{2}$	Drainage Basin & Course Name	
KOOTENAI RIVER										KOOTENAI RIVER									
15811	5500	36	26N	31W	1956	3,4,5,5 $\frac{1}{2}$,6	2	Barce Creek		11008	8600	28	9S	2W	1963	3,4,5	1	Barce Trail	
15816	4600	31	26N	30N	1965	3,4,5,5 $\frac{1}{2}$,6		Barce Midway		12007	7900	14	12S	4W	1963	3,4,5	1	Murphy Lake R.S.	2
15815	3800	5	25N	30N	1965	3,4,5,5 $\frac{1}{2}$,6		Barce Trail		12E06	8500	18	11S	4W	1963	3,4,5	1	Raven R.S.	2
14A34	5000	12	30N	26W	1937	3,4,5	2	Brush Creek											
14A11	4300	1	36N	25W	1965	3,4,5,5 $\frac{1}{2}$,6	1,2	Graves Creek		13020	8800	7	3S	11W	1963	3,4,5	1	Flathead	2
14A31	6000	4	36N	25W	1937	3,4,5,5 $\frac{1}{2}$,6	1,2	Red Mountain		13019	8600	4	8S	16W	1963	3,4,5	1		
14A37	5450	20	37N	24W	1937	3,4,5,5 $\frac{1}{2}$,6	1,2	Wesley Divide		13021	8280	11	1S	13W	1963	3,4,5	1		
										13008	7340	25	7S	16W	1948	3,4,5	1		
										13023	8450	3	2N	15W	1967	3,4,5	1		
FLATHEAD RIVER										JEFFERSON RIVER									
14B33	5150	11	24N	25W	1961	3,4,5	1,5	Bascoo Park		12007	7300	8	5W	5W	1962	3,4,5	1	Berry Meadow	
13A11	5900	31	22N	11W	1964	3,4,5		Beaver Lake		12009	7700	13	3N	7W	1966	2,3,4,5	4	Copper Mountain	
13A17	6750	30	22N	18W	1941	3,4,5	6	Big Creek		12006	6500	21	5N	6W	1941	2,3,4	4	Picnic Grounds	
13A17	6400	30	28N	18W	1962	3,4,5	1,2	Camp Misery		12001	7200	10	1N	7W	1938	1,2,3,4,5	1	Pipestone Pass	
13A02	5600	24	31N	19W	1937	1,2,3,4,5	6	Desert Mounsin											
13B04	5500	8	22N	18W	1962	3,4,5	1,5	Fatty Creek		11007	8050	21	8S	2W	1962	3,4,5	1	Call Road	
12A09	5150	35	28N	25W	1960	3,4,5	1,5	Griffin Creek Divide		11012	6900	5	4S	2W	1965	3,4,5	2	Freezout Lake	
13B12	6300	31	26N	14W	1964	1,2,3,4,5,5 $\frac{1}{2}$,6	2	Unslight Lake		11E25	7200	6	12S	1E	1965	3,4,5,5 $\frac{1}{2}$,6	2	Freezout Mountain	
12A13	5770	35	32N	22W	1942	1,2,3,4,5,5 $\frac{1}{2}$,6	2	Hell Roaring Divide		11E26	8250	26	11S	1W	1965	3,4,5,5 $\frac{1}{2}$,6	2	Hagen Dam	
14A06	4300	14	37N	22W	1954	3,4,5	6	Holbrook		11E05	6550	22	11S	3E	1934	1,2,3,4,5	3	Jack Creek	
14A05	4200	34	30N	22W	1937	3,4,5	1,2	Kishabehn		11E22	7500	13	6S	1E	1961	3,4		Lake Creek	
13A15	5250	34	30N	14W	1934	3,4,5	3	Marias Pass		11E28	8760	23	11S	2W	1967	3,4,5,5 $\frac{1}{2}$,6	2	Lion Mountain	
13A16	4200	29	35N	17W	1957	3,4,5	3	Mineral Creek		11D11	7900	32	4S	3W	1965	3,4,5	2	Lower Twin	
13A16	4300	29	35N	17W	1957	3,4,5	3	North Fork Jocko		11E23	7000	31	12S	1E	1965	3,4,5,5 $\frac{1}{2}$,6	2	Meridian Creek	
13B02	6300	3	26N	15W	1948	1,2,3,4,5	1,5	Spotted Bear Mountain		11D03	7150	33	3S	3W	1961	3,4,5	2	North Meadow	
13B02	6000	29	32N	17W	1948	1,2,3,4,5	1	Princes Lake		11E21	7500	24	10S	3E	1965	3,4,5	2	North Meadow	
13B11	5850	28	26N	16W	1951	1,2,3,4,5	1	Twin Creeks		11E20	8500	17	10S	3E	1965	3,4,5	2	Potomagon Park	
13B05	7000	23	20N	15W	1948	3,4,5	1	Upper Holland Lake		11E24	8750	6	12S	2W	1966	3,4,5,5 $\frac{1}{2}$,6	2	Sentinel Creek	
										11E27	8750	34	13S	5E	1934	Continuously	1,3,6	Upper Fork	
CLARK FORK RIVER										GALLATIN RIVER									
13C13	7100	26	8N	15W	1959	Continuously	1	Black Pine		10014	7350	3	5S	6E	1963	1,2,3,4,5,5 $\frac{1}{2}$,6	1	Arch Falls	
12B10	5700	1	15N	9W	1962	3,4,5	1,2	Copper Creek		11009	8150	9	6N	2E	1963	3,4,5	1	Beaver Basin	
12B11	6250	2	15N	9W	1962	3,4,5	1,2	Cotter Mine		10015	7250	25	1N	6E	1965	3,4,5	1	Bridgehead	
13B10	4200	12	18N	16W	1947	1,2,3,4,5	1,2	Coyote Hill		11E29	9000	18	10S	4E	1967	Continuously	2	Carrot Basin	
13C09	7800	23	8N	12W	1949	3,4,5	1	El Dorado Mine		10004	8100	14	5S	6E	1935	1,2,3,4,5,5 $\frac{1}{2}$,6	1	Devil's Slide	
13C11	8000	12	6N	13W	1957	3,4,5	1	Fed Burr Pass		10003	6600	22	4S	6E	1935	3,4,5,5 $\frac{1}{2}$,6	1	Hood Needo	
13C10	4800	11	14N	27W	1965	3,4,5	1,2	Gold Creek Lake		10013	6800	10	4S	6E	1964	3,4,5	1	Little Park	
14C10	4800	11	14N	27W	1965	3,4,5	1,2	Heart Lake Trail		11D10	7400	22	6N	1N	1967	Continuously	1	Maynard Creek	
14C10	5900	16	14N	27W	1937	1,2,3,4,5	1,2	Hoodoo Basin		13D18	6210	19	11N	7E	1967	Continuously	1	New World	
13C04	6450	6	5N	17W	1926	3,4,5,5 $\frac{1}{2}$,6	1,2	Skalkaho Summit		10001	6700	24	3S	6E	1939	2,3,4	1	Shower Falls	
13C21	5450	19	13N	14W	1951	3,4,5	1	Luttrecht Forest No. 3		11D13	8500	26	9S	2E	1967	3,4,5	3	Taylor Peaks	
13C22	4650	23	13N	15W	1951	3,4,5	8	Luttrecht Forest No. 4		11E06	7150	1	11S	5E	1934	1,2,3,4,5		Twenty-One Mile	
13C22	4650	23	13N	15W	1951	3,4,5	8	Luttrecht Forest No. 6											
13C12	7100	22	6N	13W	1958	1,2,3,4,5	1	Red Lion											
13C03	7250	30	6N	13W	1937	3,4,5,5 $\frac{1}{2}$,6	1	Skalkaho Summit											
13C05	6500	8	5N	13W	1936	3,4,5	4	Slide Rock Mountain											
13C18	6900	12	14N	13W	1961	1,2,3,4,5	8	Southern Cross											
13C07	7780	19	4N	13W	1939	1,2,3,4,5	4	Spring Gulch											
13C06	6500	19	5N	13W	1936	2,3,4	8	Storm Lake											
13C01	7400	6	14N	16W	1936	1,2,3,4,5,5 $\frac{1}{2}$,6	8	Stuart Hill											
14B01	6800	33	15N	15W	1956	1,2,3,4,5,5 $\frac{1}{2}$,6	8	Stuart Mountain											
BITTERROOT RIVER										MISSOURI RIVER MAIN STEM									
13C16	6480	28	9N	18W	1950	3,4,5	1	Ambrose		11C01	7950	1	9N	3E	1963	3,4,5	1	Battle Ridge	
13C01	5400	16	2N	17W	1937	3,4,5	1	East Fork R.S.		12C05	6200	2	8N	5W	1936	1,2,3,4,5	3	Chesman Reservoir	
13C02	7100	4	2S	19W	1934	1,2,3,4,5,5 $\frac{1}{2}$,6	1,3	Cibbons Pass		10C09	6450	23	12N	8E	1966	3,4,5,5 $\frac{1}{2}$,6	1	Deadman Creek	
14C07	5940	5	4N	23W	1960	3,4,5,5 $\frac{1}{2}$,6	1	Lost Horse		10C07	8000	10	8N	8E	1963	3,4,5	1	Elk Peak	
14C02	5680	19	1S	23W	1937	3,4,5	1	Naz Perce Camp		10C02	7000	19	9N	8E	1938	3,4,5	1	Grasshopper	
14C01	6570	25	1S	24W	1937	3,4,5	1	Naz Perce Pass		10C01	7500	34	13N	8E	1934	3,4,5,5 $\frac{1}{2}$,6	1,3	Kings Hill	
13C02	7940	5	2S	17W	1965	3,4,5,5 $\frac{1}{2}$,6	1	Saddle Mountain		9A01	5200	15	28N	16E	1941	3,4,5	7	Rocky Boy	
14C08	6510	32	5N	23W	1960	3,4,5,5 $\frac{1}{2}$,6	1	Twin Lakee		12C01	6600	16	13N	7W	1934	3,4,5	3	Stemple Pass	
ST. MARY RIVER BASIN										SUN-TETON-MARIAS RIVERS									
13A18	5800	24	34N	14W	1963	3,4,5	3	Hudson Bay Divide		12B06	5200	4	27N	11W	1964	3,4,5	2	Badger Pass	
13A03	5600	1	35N	17W	1922	3,4,5	3,9	Iceberg Lake No. 3		12B09	5700	25	23N	10W	1949	3,4,5	2	Cabin Creek	
13A14	4700	22	35N	15W	1955	3,4,5	3,9	Josephine Lower No. 9	</										

SNOW SURVEY DATA

AS OF FEBRUARY 1, 1967

(inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
						LAST YEAR	AVERAGE

COLUMBIA RIVER BASIN

KOOTENAI RIVER

BC 10	Fernie	3500	1/30	25	6.8	9.1	7.3
BC 12A	Field	4200	1/30	32	6.6	6.4	5.1
BC 11	Glacier	4100	1/29	98	32.6	22.2	19.6
BC 43	Gray Creek	5100	1/29	58	13.5	11.9	12.6*
BC 33	Kicking Horse	5400	1/30	52	15.1	13.0	10.8
BC 32	Marble Canyon	5000	1/31	54	13.0	13.2	11.1
BC 10B	Morrissey Ridge	6100	1/30	88	29.5	24.4	-
BC 10A	New Fernie	4100	1/30	51	14.9	14.1	10.8*
BC 8A	Sinclair Pass	4500	1/31	28	6.6	5.3	4.6*
BC 20A	Sullivan Mine	5100	1/30	48	13.6	10.5	9.5

FLATHEAD RIVER

13A02	Desert Mountain	5600	2/1	52	15.2	10.0	10.8*
14A03	Hell Roaring Divide	5770	1/31	93	34.9	18.2	-
13B13	Holbrook	4530	1/31	30	8.7A	6.0A	7.7*
13A05	Marias Pass	5250	1/26	51	14.3	13.0	12.9
13B02	Spotted Bear Mountain	7000	1/31	45	14.0A	10.2A	11.2*
13B11	Twin Creeks	3580	1/31	37	11.0A	8.6A	9.8*

CLARK FORK RIVER

13C13	Black Pine	7100	1/31	38	10.4	6.8	-
13C13	Black Pine Pillow	7100	1/31	SP	10.8	6.5	-
13B10	Coyote Hill	4200	2/1	32	9.4	6.2	7.8*
15C08	Hoodoo Basin	6000	1/30	119	38.1	-	-
15C08	Hoodoo Basin Pillow	6000	1/30	SP	37.1	-	-
15C01	Hoodoo Creek	5900	1/30	114	35.4	-	-
13C04	Intergaard	6450	1/31	26	6.4	4.0	5.4
15B02	Lookout	5250	1/31	94	29.2	21.6	26.4
13C21	Lubrecht Forest No. 3	5450	1/28	23	5.2	4.6	5.8*
13C22	Lubrecht Forest No. 4	4650	1/28	12	2.8	2.2	2.9*
13C08	Lubrecht Forest No. 6	4040	1/28	15	3.4	2.4	3.6*
13C05	Southern Cross	6500	1/31	22	5.2	3.1	4.3
13C18	Spring Gulch	6000	1/29	36	8.6	8.1	8.8*
13C07	Storm Lake	7780	1/30	38	9.4	5.0	8.9*
13C06	Stuart Mill	6500	1/31	22	5.2	3.4	4.4
13C01	Stuart Mountain	7400	1/29	76	22.8	15.1	21.9*
14B01	TV Mountain	6800	1/27	46	12.9	11.2	11.7*

BITTERROOT RIVER

13D02	Gibbons Pass	7100	1/31	62	17.6	9.4	15.7*
13D16	Moose Creek	6200	2/2	46	12.1	5.8	11.4*

A - Aerial observation - w. c. est. SP - Snow pillow observation - w. c. only.

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE

SNOW SURVEY DATA

AS OF FEBRUARY 1, 1967

SNOW COURSE			CURRENT DATA			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
						LAST YEAR	AVERAGE
NO.	NAME	ELEVATION					

(Inches)

JUDITH RIVER

10C09	Deadman Creek	6450	2/3	35	10.4	-	-
10C06	Spur Park	8000	2/3	61	20.2	-	-
10C06	Spur Park Pillow	8000	2/3	SP	19.1	-	-

SASKATCHEWAN (BOW RIVER)

Alb. 1	Bow River	5100	1/25	38	10.3	-	-
Alb. 2	North Course	5400	1/25	38	11.0	-	-
Alb. 5	Lake Louise	5800	1/26	41	12.4	-	-
Alb. 6	Mirror Lake	6600	1/26	45	13.7	-	-
Alb. 8	Misc. Lake Louise	5700	1/26	40	11.2	-	-
Alb. 10	Mount Eisenhower	5000	1/25	24	4.9	-	-

UPPER YELLOWSTONE RIVER

10E03	Canyon	7750	1/30	50	13.5	7.7	9.4
9D07	Cooke Station	8150	2/2	62	18.2	-	-
10E06	East Entrance	7000	1/31	30	7.0	5.7	7.9*
9D06	Fisher Creek	9100	2/2	105	33.3	-	-
9D06	Fisher Creek Pillow	9100	2/2	SP	30.6	-	-
9D05	Grizzly Peak	8400	2/1	44	11.4	6.4	7.1*
10E04	Lake Camp	7850	1/31	38	8.3	4.0	6.5*
9E01	Lodgepole	8200	2/1	37	8.8	4.6	6.6*
10E01	Lupine Creek	7300	1/31	45	10.1	5.7	7.3
10D07	Northeast Entrance	7400	1/30	35	8.6	3.8	5.8
10D07	Northeast Entrance Pillow	7350	1/30	SP	7.9	-	-
10E05	Sylvan Pass	7100	1/31	40	10.0	7.7	9.3*
10E07	Thumb Divide	7900	1/31	51	14.1	15.4	14.4*
9D02	West Rosebud	7500	1/31	40	10.8	-	-
9D08	White Mill	8700	2/2	83	24.8	-	-

SP - Snow pillow observation - water content only.

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE

SOIL MOISTURE DATA

AS OF FEBRUARY 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE

COLUMBIA RIVER BASIN

Kootenai

15B15M	Baree Trail	3800	48	7.5	-	-	-	-
14A10M	Murphy Lake R.S.	3000	48	22.6	2/1	20.1	19.9	-
15A02M	Raven R.S.	3050	48	23.0	2/1	22.2	20.7	-

Flathead

13A02M	Desert Mountain	5600	54	8.4	2/1	7.9	7.2	6.9
13A05M	Marias Pass	5250	54	6.5	2/1	5.2	5.4	5.0

Clark Fork

13C13M	Black Pine	7100	48	10.0	1/31	7.9	4.9	-
13C15M	Georgetown Lake	6450	48	9.0	1/31	5.2	3.7	-
13B19M	Seeley Lake R.S.	4030	48	11.9	2/1	10.0	10.0	-
13C03M	Skalkaho Summit	7260	48	10.8	-	-	-	-

Bitterroot

13D18M	Gibbons Pass	7100	48	7.1	1/30	4.8	5.0	5.4
14C05M	Lolo Pass	5250	48	10.6	2/1	3.6	6.3	-

MISSOURI RIVER BASIN

Beaverhead

11E13M	Lakeview	6700	48	15.3	2/1	6.6	6.0	7.7
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Madison

10D04M	Red Bluff	4800	40	4.7	2/2	2.0	1.9	2.1
11E07M	West Yellowstone	6700	48		1/29	2.6	-	-

Gallatin

10D15M	Bridger Bowl	7250	48	15.8	1/28	16.0	15.1	-
11D02M	College Site	4856	54	14.5	2/1	13.3	13.5	9.3
10D13M	Lick Creek	6860	48	18.8	1/28	18.1	-	-
11E06M	Twenty-One Mile	7150	48	10.0	2/1	2.7	3.1	-

Missouri Main Stem

10C01M	Kings Hill	7420	48	11.8	1/27	4.9	9.0	-
12C08M	Stemple Pass	6350	48	5.9	1/30	3.8	4.4	-

Yellowstone

10D11M	Battle Ridge	6020	48	17.6	1/27	11.5	12.7	12.6
10D07M	Northeast Entrance	7350	48	9.4	2/1	4.8	7.7	7.1

**AVERAGE FOR PERIOD OF RECORD

RESERVOIR STORAGE DATA

AS OF JANUARY 31, 1967

(1000 Acre Feet)

1966 ASFC Feet

			USEABLE STORAGE		
BASIN	RESERVOIR	USEABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
COLUMBIA RIVER BASIN					
Flathead	Hungry Horse	3,428.0	1,825.0	2,381.0	2,693.4**
	Flathead Lake	1,791.0	1,374.0	1,418.0	1,042.9
	Camas (Sum of 4)	45.2	23.7	27.3	30.4
	Mission Valley (Sum of 8)	100.3	24.6	57.2	31.9
Clark Fork	Georgetown Lake	31.0	21.5	28.7	24.5
	Noxon Rapids	334.6		325.1	-
Bitterroot	Como	34.9	7.6	13.1	10.8
	Painted Rocks	31.7	14.8	18.3	14.0**

MISSOURI RIVER BASIN

Beaverhead	Clark Canyon	328.9	101.8	151.2	-
	Lima	84.0	14.0	45.1	26.0
Ruby	Ruby	38.8		-	18.4**
Madison	Hebgen Lake	377.5	169.2	222.3	180.4
	Ennis Lake	41.0	39.6	39.9	36.8
Gallatin	Middle Creek	8.0	2.6	1.4	3.3**
Missouri	Canyon Ferry	2,043.0	1,307.0	1,568.0	1,553.9**
	Hauser & Helena	61.9	63.6	60.7	51.6
	Lake Helena	10.4	11.1	10.0	7.2
	Holter Lake	81.9	81.0	81.0	59.6
	Smith River	10.7	3.1	7.9	5.2**
	Ackley Lake	5.8		-	3.6
	Durand	7.0	3.1	5.9	3.9**
	Martinsdale	23.1	7.7	12.1	8.4**
	Deadman's Basin	72.2	37.6	66.2	39.5**
	Fort Peck	19,410.0	15,590.0	17,000.0	10,575.1
	Gibson	105.0	19.6	55.5	55.7
	Willow Creek	32.3	15.9	18.8	19.2
Marias	Pishkun	32.0	16.1	23.8	18.7
	Lower Two Medicine				0.0
	Four Horns	19.2	11.8	12.3	10.4
	Swift			-	19.9
Milk	Lake Frances	112.0	71.0	94.2	91.7
	Tiber	1,347.0	488.6	667.8	628.0**
	Fresno	127.2	84.0	85.1	59.4
	Nelson	66.8	51.0	51.0	36.7
Yellowstone	Lake Sherburne	66.1	16.9	11.3	18.4
	Mystic Lake	20.8	10.6	12.8	10.6
	Tongue River	68.0	30.2	33.7	11.2
	Cooney	27.5	16.2	17.3	10.8**
Big Horn	Yellowtail	1,356.0	655.7	146.2	-

Agencies Cooperating in Collecting Data Contained in this Bulletin

U. S. Forest Service
Region 1, Missoula, Montana

U. S. Geological Survey
Helena, Montana

U. S. Army Corps of Engineers
Portland, Oregon
Seattle, Washington
Omaha, Nebraska

U. S. Indian Irrigation Service
St. Ignatius, Montana

U. S. Weather Bureau
Helena, Montana

U. S. Bureau of Sports Fisheries
and Wildlife
Red Rock Lakes Refuge
Mojave, Montana

U. S. Bureau of Reclamation
Billings, Montana
Boise, Idaho

U. S. Soil Conservation Service
Montana, Wyoming, Idaho

Soil and Water Conservation Districts
Montana Counties

U. S. Bonneville Power Administration
Portland, Oregon

U. S. National Park Service
Yellowstone National Park
Glacier National Park

Montana Power Company
Butte, Montana

State Water Conservation Board
Helena, Montana

North Montana Branch Station
Agricultural Experiment Station
Havre, Montana

Montana State University
Agricultural Experiment Station
Bozeman, Montana

University of Montana
School of Forestry
Missoula, Montana

Johnson Flying Service, Inc.
Missoula, Montana

Water Rights Branch, Dept. of
Lands and Forests
Victoria, British Columbia

Department of Northern Affairs
and National Resources
Calgary, Alberta

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FEDERAL - STATE - PRIVATE
COOPERATIVE SNOW SURVEYS

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

*"The Conservation of Water begins
with the Snow Survey"*